

Surplus Plutonium Disposition Supplemental Environmental Impact Statement (SPD Supplemental EIS)



Options for Pit Disassembly and Conversion

Pit Disassembly and Conversion Facility in F-Area at SRS

Pit Disassembly and Conversion to Plutonium Oxide

Pit Disassembly and Conversion Capability in K-Area at SRS

Pit Disassembly and Conversion to Plutonium Oxide

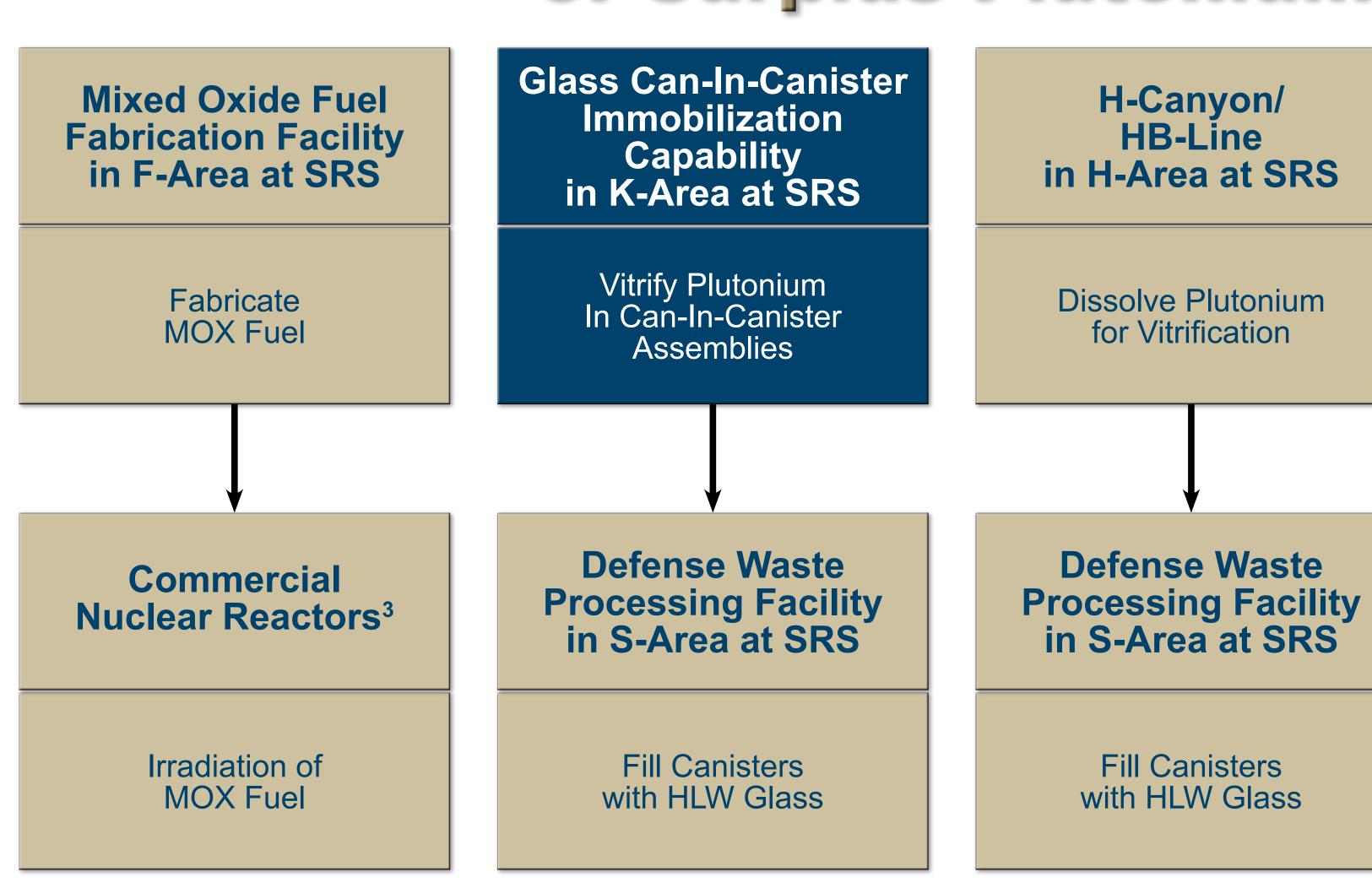
Plutonium Facility (PF-4) in TA-55 at LANL¹

Pit Disassembly and Conversion to Plutonium Metal and/or Oxide

H-Canyon/HB-Line in H-Area at SRS²

Pit Disassembly and Conversion to Plutonium Oxide

Options for Disposition of Surplus Plutonium



Waste Isolation
Pilot Plant
in New Mexico

Disposal

- ¹ Would include metal oxidation in the MOX Fuel Fabrication Facility.
- ² The H-Canyon/HB-Line option would have to be executed in conjunction with another option.
- ³ DOE is evaluating impacts of MOX fuel irradiation in 5 TVA reactors.

Preferred Alternative

The MOX fuel alternative is DOE's preferred alternative for surplus plutonium disposition. DOE's preferred alternative for disposition of surplus plutonium that is not suitable for MOX fuel fabrication is disposal at WIPP.

DOE's preferred alternative for pit disassembly and the conversion of surplus plutonium metal to feed material for the MFFF, is to use some combination of facilities at TA-55 at LANL, K-Area at SRS, H-Canyon/HB-Line at SRS and MFFF at SRS, rather than to construct a new stand-alone facility at SRS.

= new or enhanced capability

= existing or facility under construction

HLW = high-level radioactive waste

LANL = Los Alamos National Laboratory

MFFF = Mixed Oxide Fuel Fabrication Facility

MOX = mixed oxide

SRS = Savannah River Site

TVA = Tennessee Valley Authority

WIPP = Waste Isolation Pilot Plant